46. The expenditure incurred by the Forest Settlement Officers and the cost of their establishments entertained during the year is exhibited in the following table:—

No.	Division.	Forest Settlement Officers.		Office Establishments.		Contingencies.	Total.
		Pay.	Travelling Allowance.	Pay.	Travelling Allowance.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	North Thána	5,438 13 7	1,770 14 0	2,260 14 2	723 15 8	429 5 9	10,623 15 2
2	South Thána						
3	East Khándesh	11,263 2 10	1,923 12 8	4,453 6 11	1,433 9 11	291 10 10	20,365 11 2
4	West Khándesh						
5	Ahmednagar	....	....	719 11 9	303 0 3	192 5 0	1,215 1 0
6	Poona	....	....	1,176 0 5	387 14 5	360 14 6	1,924 13 4
7	Sátára	....	....	300 0 0	120 0 0	126 9 6	546 9 6
8	Surat (Dángs)	8,448, 2 2	2,100 0 0	1,105 10 8	260 4 14	148 0 3	12,062 2 0
9	Panch Mahâls	....	....	....	....	91 15 11	91 15 11
	Total ..	25,150, 2 7	5,794 10 8	10,015 11 11	3,228 13 2	1,640 13 9	45,830 4 1

3.—FOREST BOUNDARIES.

47. The work of erecting special forest boundary marks according to the standing orders on the subject was pushed on with vigor during the year, in almost all the divisions of the Northern Circle, and the following statement will show the number of cairns erected, together with the length of the boundary lines demarcated by them in miles, and the cost incurred on their account:—

No.	Division,	Length of Boundaries in Miles.	Number of Cairns erected.			Cost.
			Large.	Small.	Total.	
						Rs. a. p.
1	North Thána	65	998	...	998	494 8 6
2	South Thána	30½	93	442	535	178 1 6
3	East Khándesh	32	3	129	132	216 14 3
4	West Khándesh... ...	25½	473	2,892	3,365	1,606 8 2
5	Násik	352	2,842	4,148	6,990	3,406 5 1
6	Ahmednagar	92	1,138	...	1,138	696 3 6
7	Poona	283	1,101	6,245	7,346	2,150 0 9
8	Sátára	219	263	5,865	6,128	1,538 14 6
9	Sholápur	99	271	1,021	1,292	392 13 3
10	Surat	158	283	53	336	737 14 0
11	Panch Mahâls	97	76	1,335	1,411	387 4 0
	Total ...	1,453	7,541	22,130	29,671	11,805 7 6
	During 1890-91 ...	1,682	5,993	14,683	20,676	8,935 15 6

48. It will be seen that although the length of boundary line marked out is less this year than last, still a greater number of marks has been built during this year, the explanation being that natural boundaries, such as rivers and nálas, have come into the total linear distance of boundary line to a smaller extent this year than last, and further the country traversed by the demarcation in 1891-92, has been rougher and more irregular, so that boundary marks have been required at closer distances.

4.—PRIVILEGES CONCEDED TO VILLAGERS.

49. No restrictions have been made during the year, and no expansions of the privileges, already conceded by Government before the year opened, to the local

population in any of the Collectorates of the Northern Circle. In the Thána Collectorate the concession, allowed last year, of the removal, by villagers of the forest villages which have contributed forest lands to the formation of the forest-block to which a coupe of the season belongs, of all branch-wood less than 6″ in girth, of the felled trees, and the cutting of shrubs and undergrowth, such as brushwood, &c., for use as *ráb* or as firewood according to their pleasure, free of charge, from the coupes of the year which are under exploitation by contractors or purchasers, was taken advantage freely in respect of coupes which are not far distant from villages; but the material was taken almost entirely for use as firewood, and not to any extent for purposes of ash manure; while coupes remote from villages and difficult of access were not indented upon by the villagers for the branch loppings or for brushwood, &c., and this material remained in several coupes with the prospect of rotting on the ground since the contractors cannot take it. No complaints have been received from villagers during the year of contractors having prevented them from taking any of the lopped branchwood under 6″ in girth, but some of the contractors were detected in appropriating some of this neglected branchwood, and were fined for doing so, because it did not belong to them, and they had not received permission to appropriate it; however, the Collector of Thána very judiciously empowered the Divisional Forest Officers to allow the contractors and purchasers of coupes to remove the small branchwood and the undergrowth when it was clear that the villagers would not take it; as it would not only be wasted otherwise, but would cause heavy conflagrations in future years when these areas, closed for reproduction, and full of grass, were fired by mischance. Not a single petition was made asking for permission to go into any of the unsold coupes which had failed to find purchasers, in order to cut and remove timber, firewood or materials for ash manure for local supply; and not a complaint was received on the point of local supply being starved.

50. Forest villagers in the Thána Collectorate do not take full advantage of the privilege given to them of taking branchwood, &c., for ráb or ash manure from the coupes, because vegetation for conversion into ash manure can generally be obtained by them, more conveniently and in sufficient quantities, from other sources of supply, which are nearer to their fields than the coupes; they have the run of all open forests for grass and brushwood and of the Protected Forests for such produce also, and likewise to lop the branches of all but a few kinds of trees. Some experiments were made by the Divisional Forest Officer, North Thána, during the year to gauge the quantities of ráb and firewood material, placed at the disposal of the forest villagers, by the branchwood and brushwood concessions. Test plots were taken in different coupes of varying constitution, and the material was carefully weighed about 48 hours after it had been cut; and the results were strikingly even; they gave an average yield of about lbs. 10,000 per acre. Free grazing of cattle was allowed to, practically, all the cattle of the forest villages and of some of their neighbouring villages also in the Thána district.

51. In other divisions, and especially in the Deccan, the privilege under the new Grazing Rules of allowing free grazing for the agricultural and milch cattle of all forest villages which have contributed gáirán to the formation of a Reserved Forest, within the entire open forest of the village instead of, as used to be, in the gáirán portion only, has worked very much to the advantage of the owners of such cattle, as the latter enjoy far better pasturage, and have a much broader area to roam over than they had before.

52. The Privilege Code of the Khándesh district is very comprehensive, but by order of Government issued in October 1890, the privileges of free grazing and of cutting of wood and bamboos in all the ranges of West Khándesh, except Sindkheda and Dhulia, were suspended for one year on account of the general prevalence of forest fires; the effect, however, of this suspension not having been as was desired and anticipated, and on a reference to Government on the point, it was ordered, in October 1891, that all suspension of privileges should cease; and consequently the concessionaries have been in the full enjoyment of their liberty in the forests of grazing, cutting and taking. No changes have been made in the Khándesh Code during the year.

53. Owing to the scanty and unseasonable rainfall in the Deccan, areas of closed forest in the divisions in that part of the country, have been opened to cattle

grazing, and to a great extent free of charge, as a special privilege to the forest and other local villagers.

54. The expenditure incurred upon the formation and constitution of Reserved and Protected Forests, during the year, has amounted to Rs, 78,881-6-5 distributed thus :—

	Rs.	a.	p.
(1) Salaries and travelling allowances of Forest Settlement Officers not charged to Forests	30,944	13	3
(2) Salaries and travelling allowances of establishments employed under Forest Settlement Officers and charged in the Forest accounts, and the contingent expenditure of the latter	14,885	6	10
(3) Demarcation of Forest boundaries upon the ground by the construction of special forest boundary marks ...	11,805	7	6
(4) Compensation for land and rights	21,245	10	10
Total ...	78,881	6	5

55. The work actually effected during the year, and represented by the expenditure detailed above, comprises—

(*a*) the settlement of 172 square miles at a cost of Rs. 266·4 per square mile ;

(*b*) the demarcation of 1,453 miles of forest boundary at Rs. 8·1 per mile ; and

(*c*) the purchase of 1,762 acres of land for forest reservation at Rs. 11·8 per acre.

CHAPTER II.

SURVEYS AND WORKING PLANS.

A—SURVEYS.

56. The operations of the Forest Survey Branch of the Government of India, in the Northern Circle during the year, were under the superintendence of Colonel Hutchinson, and were carried on in the divisions of North and South Thána, Násik, Ahmednagar, Poona and Sholápur; and the following statements show a comparison of the work performed and the expenditure incurred on Forest Surveys, during the survey years, ending 30th September 1891 and 30th September 1892, as directed in Government Resolution No. 4515 of the 3rd July 1891, in the Revenue Department :—

Statement showing the Amount and Cost of Work done by No. 2 Camp of No. 17 Party (Bombay Forests) in the Northern Circle during Survey year ending 30th September 1891.

District.	Scale.	Triangulation. Area in square miles.	Triangulation. Total Cost.	Triangulation. Cost per square mile.	Traversing. Area in square miles.	Traversing. Total Cost.	Traversing. Cost per square mile.	Detail. Area in square miles.	Detail. Total Cost.	Detail. Cost per square mile.	General Cost per square mile.	Remarks.
			Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	
Poona {	4″	170	353 15 6	2 1 4	16	368 14 11	23 0 11	124·35	10,852 9 10	87 4 5	112 6 8	Táluka Khed only.
Thána ... {	6″	...	...	...	39	946 1 6	24 4 2	52·86	7,576 0 8	143 5 2	...	Táluka Khed.
	...	...	...	...	45	1,091 9 0		39·70	5,690 14 6		...	Traversing is in advance in the Váda Táluka and the detail survey belongs to the Bhiwndi Táluka.
Poona ...	16″	...	...	...	...	...	...	22	4,255 5 3	...	193 6 9	Haveli, Bhimthadi and Sirur Tálukas.
Total ...	..	...	353 15 6	...	...	2,406 9 5	...	...	28,374 14 3	...	*31,135 7 1	*Is the total cost of the Northern Circle.